

# Improving Tax Compliance of Bilingual Taxpayers with Effective Consumer Communication

*Christine C. Bauman, University of Northern Iowa; David Luna, Baruch College; and Laura A. Peracchio, University of Wisconsin-Milwaukee*

---

In recent remarks to the National Press Club, Internal Revenue Service (IRS) Commissioner Everson stated that “those who seek to comply but cannot understand their tax obligations may make inadvertent errors or ultimately throw up their hands and say—why bother.” Bilingual and Limited English Proficient (LEP) taxpayers are examples of such a group as they are challenged to comply with the U.S. tax system due to lack of understanding, tax forms and publications not available in their native languages, and cultural barriers. In response, Executive Order 13166 requires Federal agencies and Federally-funded programs to provide language assistance necessary to ensure meaningful access to products and services at no cost to LEP persons. As mandated, IRS established the Multilingual Initiative (MLI) in October 2003 to ensure that LEP taxpayers have the products and services that they require to understand and comply with their tax responsibilities.<sup>1</sup>

IRS projects that, in 2010, the U.S. foreign-born and immigrant populations will increase to 34 million taxpayers, up 5.6 million from 2000. Of this group, 13 percent will speak Spanish in their homes. Despite this rapid growth in the bilingual and LEP population, little research is done on examining the communication methods and strategies that best serve bilingual taxpayers.

The purpose of this study is to examine how bilingual taxpayers process technical tax information by comparing the accuracy of their answers on short exercises when only written rules are provided as compared to condensed written rules accompanied by figures and pictures. This paper uses survey data from 94 adult, bilingual (Spanish/English) and LEP participants to specifically examine their understanding of key Earned Income Credit (EITC) concepts. The study is grounded in consumer marketing research that finds pictorial cues can improve bilingual individuals’ understanding of a message. The study is designed to gain insight as to whether a simpler method of presenting tax information to bilingual and LEP taxpayers may improve communications leading to improved compliance, reduced EITC overclaims, and increased EITC participation.

The survey was administered in both Spanish and English. Participants were given technical information for a special rebate rule using text and text combined with pictures. The participants were asked to complete five short exercises applying the technical information that was read. Both the technical language and examples used in study are nearly identical to those used in 2001 IRS Publication 596 (IRS Publication 596) for EITC.

The results of the survey are only marginally significant about whether pictures combined with text assist participants in more accurate performance. However, claims about the detrimental effects of poor literacy and tax complexity on the tax compliance of bilingual and LEP taxpayers are confirmed.

The paper begins with a brief description of the tax compliance problems facing bilingual and LEP taxpayers followed by an overview of the extant consumer marketing research examining bilinguals. The experiment and data are described along with findings and research limitations. The paper concludes with summary remarks.

## **Tax Compliance Challenges for Bilingual and LEP Taxpayers**

IRS, Treasury Inspector General for Tax Administration (TIGTA), and U.S. General Accounting Office (GAO) have all released studies pointing to EITC concerns. For example, an IRS study (IRS 2002a) estimates that between 2.3 million and 3.4 million individuals were eligible for the EITC in 1996 but failed to file a return to obtain the credit resulting in \$2.1 billion to \$3.5 billion in EITC going unpaid. About 24 percent of the EITC nonfilers originated from Hispanic countries, resulting in nearly \$1.1 billion in EITC benefits going unclaimed, or 31 percent of the total estimated unclaimed credits. In addition to the language barriers, about 36 percent of the EITC nonfilers did not graduate from high school.

Although research shows that EITC has helped lift millions of individuals out of poverty, the program has also been plagued with high rates of noncompliance. The IRS (IRS 2002b) estimates the EITC overclaim rates for Tax Year 1999 were between 27 percent (\$8.5 billion) and 32 percent (\$9.9 billion) of the dollars claimed. An IRS/Treasury taskforce later found that three leading errors were responsible for about \$7 billion of overclaims annually. First, taxpayers claimed children who were not qualifying children (\$3 billion). Second, taxpayers used an incorrect filing status of either single or head of household (\$2 billion). Third, taxpayers underreported their incomes (\$2 billion).

A TIGTA study (TIGTA 2003) estimates that, of those taxpayers claiming the EITC, 62 percent go to a paid tax return preparer. Not only are bilingual or LEP taxpayers disadvantaged in understanding IRS forms and instructions, so

are their tax preparers. Tax return preparers are responsible for 68 percent of the errors or overclaims on EITC returns. In addition, there is another unquantifiable group of “invisible preparers” contributing to EITC overclaims.

A lack of understanding by the taxpayer, tax preparer, and often the post-filing tax advisor about EITC rules and requirements leads to a highly noncompliant program (O’Connor, 2001). For instance, when the President’s Tax Reform Panel met in March 2005 to discuss fairness issues, experts noted that EITC eligible filers often lack the literacy skills to comprehend IRS instructions. Poor literacy was cited as the primary reason why over 70 percent of EITC filers use professional tax preparers, one-fifth more than the general population (CCH, March 2005).

According to the National Institute for Literacy (NALS) Web site (<http://www.nifl.gov>), literacy is defined according to the Workforce Investment Act of 1998 as “an individual’s ability to read, write, and speak in English, compute, and solve problems at levels of proficiency necessary to function on the job, in the family of the individual, and in society.” The NALS classifies literacy into five levels as follows:

*Level 1:* Adult can read a little but not well enough to fill out an application, read a food label, or read a simple story to a child.

*Level 2:* Adult can perform more complex tasks such as comparing, contrasting, or integrating pieces of information, but usually cannot perform higher-level reading and problem-solving skills.

*Levels 3-5:* Adults can perform the same types of more complex tasks on increasingly lengthy and dense texts and documents.

According to NALS, between 21 percent to 23 percent of the adult population (44 million) have Level 1 literacy, while another 25 percent to 28 percent (45 million-50 million) possess Level 2 literacy. This represents nearly half the adult population. Further, NALS identifies several factors influencing the relatively large number of Level 1 adults, including 25 percent (11 million) of the Level 1 group were immigrants who may have just been learning to speak English, and 60 percent of Level 1 adults did not complete high school.

According to the National Taxpayer Advocate (Olson, 2005), the EITC provision contains 2,680 words and 13 subsections; requires at least a 12th-grade education to understand; and IRS Publication 596 contains 53 pages of forms, instructions, and worksheets.

The combination of poor English and literacy skills can be fatal for tax compliance of bilingual and LEP taxpayers participating in the EITC program. It is not surprising that significant errors are made by taxpayers and tax return preparers, especially bilingual, LEP, and illiterate taxpayers, because of their inability to understand the written guidance and forms. If a taxpayer cannot understand how to read or comprehend, it is irrelevant how much written

guidance is available.

According to a study by GAO (U.S. GAO, 2003), testing forms and instructions can help ensure their clarity and thereby benefit taxpayers and IRS. In response, IRS recognized that testing could be beneficial but cited tight time frames and constrained resources as a reason for the sparse amount of review.

GAO identified several benefits to taxpayers of improved clarity in tax forms and instructions, including reduction in time and expense of tax preparation and reduction in postfiling controversy. Further, IRS could also experience gains from clearer forms and instructions in the form of less audit resources devoted to postfiling controversy, less demand for taxpayer assistance, and better knowledge for development of future forms and instructions. In previous studies, both GAO and TIGTA recommended that IRS do more to identify what individual taxpayers find difficult to understand about tax forms or publications (U.S. GAO, 1994; TIGTA, 2000). In the 2003 GAO study, five individual income tax areas were tested over the period July 1997 to June 2002, including EITC schedules and instructions. Based on this testing, IRS revised EITC forms and attributed the resulting decrease in EITC errors to a new approach developed for structuring EITC forms and instructions related to the definition of qualifying child which has historically been a troublesome area for overclaims.

Although it appears from the study that the evaluation was of English forms and instructions only, pretesting of Spanish forms may reap similar benefits. As stated, most testing involves one-on-one interview and small focus groups. IRS indicated in the study that they lack formal, written guidelines and procedures for determining when testing would be beneficial. Admittedly, it is difficult to quantify how much testing alone contributes to the clarity of tax forms and instructions. However, in some instances, IRS officials believe testing has contributed to significant declines in taxpayer errors with IRS recouping testing costs in the first year following testing.

The goal of this study is to evaluate whether lessons learned in consumer marketing about bilingual communication can inform IRS communications and improve tax compliance. An overview of the extant marketing research follows.

## **Consumer Marketing Research about Bilinguals**

In the United States, approximately 20 percent of taxpayers consider themselves bilingual (U.S. Census 2000). Even in the United States, a nation sometimes thought to be largely monolingual, the proportion of the total population that speaks a second language fluently is considerable and continues to increase due to immigration and acculturation patterns. One of the largest

bilingual segments in the United States is the Hispanic population. Over 72 percent of the 31 million Hispanics in the United States speak both English and Spanish (Levey, 1999). The increasing prevalence of bilingual individuals both in the United States and internationally intensifies the need to consider how bilingual individuals process both visual and linguistic information. Particularly, understanding how bilingual individuals process messages in their first versus their second language is of crucial importance to those trying to communicate with them effectively.

Luna and Peracchio (2001) examine how pictures can enhance text processing by bilingual individuals. Because of multiconnected word and concept relationships, bilinguals are hypothesized to think more visually than monolinguals. They find that pictures seem to facilitate processing of messages in the bilingual's weaker language, and that pictures may improve the cross-language equivalence of written messages.

In the marketing area, minimal research has been conducted to understand how bilingual consumers process information. This is surprising, given that demographic trends indicate that bilingual populations are increasingly rising around the world. Much work remains to be done to understand bilingual cognitive processing.

Previous research indicates that pictorial information offers superior results with respect to measures such as recall (Paivio and Lambert, 1981; Snodgrass, 1984) and facilitates tasks such as word translation (La Heij et al., 1996; Sholl et al., 1995). Pictures are able to access the conceptual system more effectively and/or directly than words, especially second language words (Kroll and de Groot, 1997; Sholl et al., 1995).

Visual cues may be of particular importance for bilingual individuals. Bilinguals tend to have a higher level of awareness of the arbitrariness of language than monolinguals because they can use two different words to communicate the same concept (Bialystok, 1988; 1991). Therefore, bilingual individuals seem to prefer to rely on pictures which are a language-independent representation that can aid information processing.

## **Picture Effects in Advertising**

A number of advertising researchers have examined the role of pictures in ad processing by monolingual individuals (Alesandrini, 1983; Holbrook and Moore, 1981; Houston et al., 1987; Lutz and Lutz, 1977; Schmitt et al., 1993). Several studies have theorized that pictures that are congruent with the brand name of the product featured in an ad (interactive pictures) facilitate processing of the message by providing a frame to process the ad claims (Houston et al., 1987; Lutz and Lutz, 1977).

In an experiment, Luna and Peracchio (2001) tested the memory of bilingual subjects for several first and second language ad versions, including low, moderate, and high picture-text congruity ads. The results show that second language ads result in low memory when the pictures are not congruent with the ad's copy or when the pictures only exhibit a moderate degree of congruity with the copy. However, when the ad's picture is highly congruent with its copy, the study reveals an interesting result: second language ads can lead to a high level of memory, similar to first-language ads. These findings suggest that, if constructed adequately, ads in the consumers' second language can be as memorable as ads in their first language.

In another study, Luna and Peracchio (2005) examine the effect of pictures on ad processing by bilingual consumers in situations where verbal representations are too effortful to comprehend. Their findings apply to bilinguals for whom a second language is more effortful to process, and to monolinguals who are exposed to texts written in technical jargon. Both groups will use the strategy of becoming more "visual" and rely on nonverbal cues to help them comprehend the text.

Using the findings from consumer marketing where consumers tend to rely on nonverbal cues to process information, we applied this theory to test whether taxpayers would perform better when technical tax text is accompanied by pictorial cues. A description of the experiment, data, and results follows.

## **Experiment**

In order to examine whether picture cues combined with native language help bilingual taxpayers to better understand tax laws, a survey experiment was conducted. Subjects were provided technical information about a special rebate that allows working families with qualifying children to receive a cash rebate from the Federal Government. The survey was divided into three parts. The first part provided the technical background about the rebate rule. The second part asked five questions, with the first four questions testing application of the rules. All four examples were based on IRS examples listed in the 2001 Publication 596.<sup>2</sup> The fifth question required subjects to locate the rebate amount from a short table.<sup>3</sup> These EITC content questions were chosen as previous studies have shown that qualifying children and filing status are significant sources of errors in EITC claims. The first two questions asked if the children were qualifying children, and the latter two questions asked who could claim the qualifying children.

Finally, the third part of the survey requested extensive demographic information from the participant about language, literacy, culture, family, age,

and tax administration. These determinants served as independent variables.

The dependent variable—technical information about the qualifying child's relationship, age, and residency—was measured using surveys administered in four forms, including English text only, Spanish text only, English text and pictures, and Spanish text and pictures. See Appendix A for an example of a complete survey of English text combined with pictures. Appendix B shows excerpts of the English text only survey.

Participants were given a choice about whether to complete parts two (questions) and three (demographic information) in English or Spanish. All subjects chose the Spanish version.

## **Subjects**

Some 94 adult subjects participated in the study. Subjects were students at a nonprofit agency that assists immigrants. An unlimited amount of time was provided to complete the survey, with most participants completing the survey within 75 minutes. As a motivation to complete the survey, the authors made a \$500 donation to the educational programs of the host agency.

## **Results**

A total of 94 Hispanic respondents of different national origins (Mexican, Puerto-Rican) participated in the study. The average age was 32. Fifty-nine respondents were male. The average number of years of education was 11 (third year of high-school). Respondents seem to make greater use of Spanish than English—on a 5-point scale (1=only English; 5=only Spanish), they indicated a 3.61 average with regard to their relative use of both languages at home, at work/school, with friends, and watching TV. Respondents were more proficient in Spanish than in English ( $M = 4.53$  versus  $M = 2.75$ ;  $F(1, 79) = 154.78, p < .001$ ), as indicated by the multi-item language scale used by Luna and Peracchio (2001). Respondents indicated that they were fairly proficient in addition, subtraction, multiplication, and division on a 5-point scale, where higher scores meant greater proficiency ( $M = 3.87$ ). In our sample, 75 people indicated that they had never done their income taxes on their own before. All but three of our respondents indicated that they earned less than \$32,000 a year.

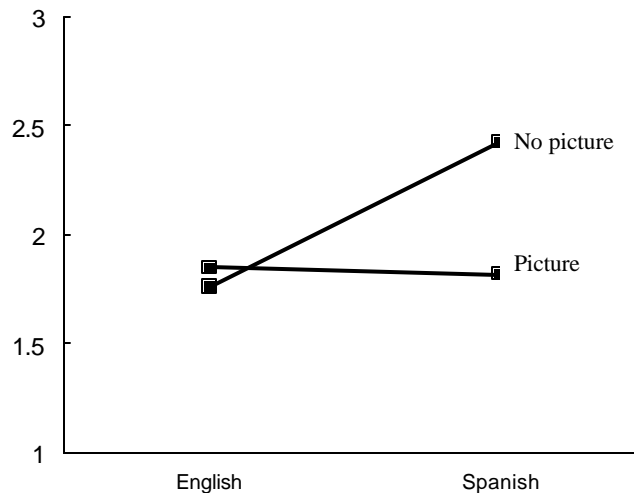
The dependent variables were divided into two groups: those questions that made use of the information presented in the verbage/diagram (questions 1, 2, 3, and 4), and those that dealt exclusively with the rebate table (questions 5a, 5b, 5c, 5d, and 5e). If the participant answered a question correctly, 1 point was awarded, otherwise 0 points. Thus, each participant had two com-

prehension scores, resulting from summing the points for each group of questions: a “verbal” comprehension score and a “table” comprehension score.

## Verbal Comprehension

As noted in Table 1, the verbal comprehension score had a (marginally) significant interaction of language and pictures. Comprehension is not affected unless participants get instructions in their most proficient language (Spanish) and in verbal form. Seeing the instructions in the diagram actually hurt them. This is particularly troublesome, given that prior research finds that diagrams of a text help form mental representations of it (Glenberg and Langston, 1992). The incongruent results in this study could be due to the fact that the diagrams used in the study are not particularly helpful; diagrams in general are not helpful to processing tax information; or diagrams are not helpful to these subjects.

**TABLE 1**  
**Estimated Marginal Means**  
**Comparison of Text Only and Text with Pictorial Cues**



## Table Comprehension

Here, the diagram should not have an effect on the results—respondents did not need it to answer the questions. Also, they did not really need to use



language much (just look up numbers on a table). Consequently, neither diagram presentation nor language (or their interaction) had significant effects on comprehension scores.

However, several of the covariates did have an effect on table comprehension—education (positive); math proficiency (positive); language proficiency in instructions language (positive); and proficiency in English relative to Spanish (the weaker they were in English relative to Spanish, the worse they performed). These variables, particularly the first three, could be considered measures of respondents' "literacy" level; so, the higher their literacy, the better they performed in the table lookup task.

In addition to examining the accuracy of responses, the data was analyzed by coding participant thoughts—decision explanations for the answer provided. We parsed the explanations into correct for the right reason, correct for the wrong reason, correct and no reason provided, and wrong. The dependent variable was examined along the four conditions (English text only, Spanish text only, English text and pictures, Spanish text and pictures). The results are similar to those reported.

A confounding problem found in the study was the use of the word "qualifying child" throughout the survey. During the administration of the survey, six participants specifically asked what kind of child is a "qualified child"—a sick or mentally challenged child. These participants indicated that they never refer to any of their own children as a "qualified child" in any other context, thus resulting in confusion. This raises a practical implication in that removing technical tax jargon from taxpayer publications and forms may lead to better understanding. Another practical finding and consistent source of confusion was learned from Question 5d, "if a person has total income of \$5,251 and three children, how much is his/her rebate?" Many respondents did not answer this question since the table (taken from IRS Publication 596) does not show more than two children. This raises a primary source of confusion for taxpayers with more than 2 children. A possible solution may be to add another column for taxpayers with "3 children and above," showing the same amounts for families with two children.

### **Limitations of the Study**

The study includes several additional limitations. First, a small sample size is used which may not be representative of bilingual and LEP taxpayers at large. Second, the pictures provided may not have been helpful to the participants for this type of technical information. Third, as was evident in designing the survey and evaluating participants, several forms of Spanish exist, depending on origin (e.g., Mexico, Puerto Rico, and Spain) which can lead to misinterpretations and confusion. The examples used in the study are also

based in large part on excerpts from IRS Publication 596. This could be contributing to the mixed result. The reliability of the survey data used in the study is dependent on the accuracy and honesty of participants' responses. It is possible that participants may intentionally or unintentionally give incorrect answers to the survey questions.

## **Summary Remarks**

As Spanish and other immigrant populations grow, it is imperative for tax administration and tax compliance to find more effective ways to communicate with bilingual and LEP taxpayers. Instead of dealing with the issues of EITC nonfilers and overclaims on a taxpayer-by-taxpayer basis, significant gains could be made by educating large numbers of taxpayers with improved communication. By examining research in other disciplines, such as consumer marketing, lessons can be learned about effective bilingual communication. A positive step may be adding pictures to the English-Spanish Glossary of Words and Phrases (IRS Publication 850). If taxpayers and tax preparers cannot understand how to comply due to LEP issues, literacy issues, or both, then perhaps a new method of instruction and communication is in order.

It should be mentioned that IRS is trying to improve bilingual communication. In addition to the promising MLI taskforce goals discussed earlier, IRS introduced a pilot EITC precertification test in 2004 as an effort to reduce EITC overclaims. As part of that pilot test, a subset of Spanish taxpayers were given documents in both English and Spanish. The purpose of this subset was to determine whether Spanish language documents would increase the number of taxpayers attempting to certify a child's residency. No information is yet available about the impact of these Spanish documents to LEP taxpayers.

Low-income taxpayers with literacy issues and English language barriers have also been offered verbal forms of communication. For example, IRS TeleTax is a toll-free automated service that provides helpful tax topics in English and Spanish. IRS has previously teamed with the nationwide Spanish-language Telemundo Network to provide helpful tips for claiming tax credits, preparing a Federal income tax return, and other topics.

On January 27, 2005, IRS released a new online tool "EITC Assistant" in both English and Spanish for determining EITC eligibility. Although it is unclear how many EITC claimants have computer access, this is a step in the right direction. It is also hoped that the recently adopted uniform definition of qualifying child will reduce complexity in EITC claims.

Future research in this area should aim at assessing and evaluating how to better communicate with bilingual taxpayers to improve compliance, reduce EITC overclaims, and increase EITC participation rates among bilinguals.

## Acknowledgements

The authors thank the IRS Research Conference staff and discussant, Nina Olson, National Taxpayer Advocate, for their helpful comments. The authors are also grateful to Katie Kenagy, Ana Montijano, Julie Perez, and Tony Tsai for their research assistance.

## Endnotes

- <sup>1</sup> MLI's mission is to facilitate IRS's efforts to develop and administer policies and strategies which assist LEP taxpayers in meeting their tax responsibilities. Initiatives that MLI has identified to fulfill this mission include establishing an IRS "Language Assistance Policy," administering a LEP needs assessment process, identifying and translating LEP vital documents, establishing translation standards, and ensuring cross-functional resolution of MLI-related issues.
- <sup>2</sup> Example 1 is from page 12 of 2001 IRS Publication 596. Example 2 is from page 13 of 2001 IRS Publication 596. Example 3 is based on residency rules. Example 4 is from page 15 (example 1) of 2001 IRS Publication 596.
- <sup>3</sup> Example 5 is an excerpt of the EITC table from 2001 IRS Publication 596, page 46.

## References

- Alesandrini, Kathryn Lutz (1983), "Strategies that Influence Memory for Advertising Communications," in *Information Processing Research in Advertising*, Richard Jackson Harris (editor), Lawrence Erlbaum, Hillsdale, NJ, pp. 65-82.
- Bialystok, Ellen (1988), "Levels of Bilingualism and Levels of Linguistic Awareness," *Developmental Psychology*, 4, pp. 560-567.
- Bialystok, Ellen (1991), "Metalinguistic Dimensions of Bilingual Language Proficiency," in *Language Processing in Bilingual Children*, Ellen Bialystok (editor), The Cambridge University Press, pp. 113-140.
- CCH 2005TaxDay, "Tax Reform Panel Discusses Fairness Issues," March 25.

- Glenberg, Arthur M. and Langston, William E. (1992), "Comprehension of Illustrated Text: Pictures Help to Build Mental Models," *Journal of Memory and Language*, 31, pp. 129-151.
- Holbrook, Morris B. and Moore, William L. (1981), "Feature Interactions in Consumer Judgments of Verbal Versus Pictorial Presentations," *Journal of Consumer Research*, 8 (June), pp. 103-113.
- Houston, Michael J.; Childers, Terry L.; and Heckler, Susan E. (1987), "Picture-Word Consistency and the Elaborative Processing of Advertisements," *Journal of Marketing Research*, 24 (November), pp. 359-369.
- Internal Revenue Service SB/SE Research (2002a), "Participation in the Earned Income Tax Credit Program for Tax Year 1996," Fiscal Year 2001 research project #12.26.
- Internal Revenue Service (2002b), "Compliance Estimates for Earned Income Tax Credit Claimed on 1999 Returns," Washington, DC, February 28, 2002.
- Kroll, Judith F. and de Groot, Annette (1997), "Lexical and Conceptual Memory in the Bilingual: Mapping Form to Meaning in Two Languages," in *Tutorials in Bilingualism: Psycholinguistic Perspectives*, Annette de Groot and Judith F. Kroll (editors), Lawrence Erlbaum, Mahwah, NJ, pp. 169-199.
- La Heij, Wido; Hooglander, Andre; Kerling, Robert; and Van Der Velden, Esther (1996), "Nonverbal Context Effects in Forward and Backward Word Translation: Evidence for Concept Mediation," *Journal of Memory and Language*, 35 (October), pp. 648-665.
- Levey, Richard H. (1999), "Give Them Some Credit," *American Demographics*, May, pp. 41-43.
- Luna, David and Peracchio, Laura A. (2005). "Visual and Linguistic Processing of Ads by Bilingual Consumers," working paper.
- Luna, David and Peracchio, Laura A. (2001), "Moderators of Language Effects in Advertising to Bilingual: A Psycholinguistic Approach," *Journal of Consumer Research*, 28 (September), pp. 284-295.
- Lutz, Kathy A. and Lutz, Richard J. (1977), "Effects of Interactive Imagery on Learning: Application to Advertising," *Journal of Applied Psychology*, 62 (August), pp. 493-498.

- O'Connor, M. (2001), "Tax Preparation Services for Lower-Income Filers: A Glass Half Full, or Half Empty?" *Tax Notes*, 2001 TNT 5-106.
- Olson, N. (2005), "Complexity, Compliance, and Communication: Why Should Taxpayers Comply in a Complex and Changing Tax Environment?" Presentation to the President's Advisory Panel on Federal Tax Reform.
- Paivio, A. and Lambert, Wallace (1981), "Dual Coding and Bilingual Memory," *Journal of Verbal Learning and Verbal Behavior*, 20, pp. 532-539.
- Schmitt, Bernd; Tavassoli, Nader T.; and Millard, Robert T. (1993), "Memory for Print Ads: Understanding Relations among Brand Name, Copy, and Picture," *Journal of Consumer Psychology*, 2 (1), pp. 55-81.
- Sholl, Alexandra; Sankaranarayanan, A.; and Kroll, Judith F. (1995), "Transfer Between Picture-Naming and Translation: Test of Asymmetries in Bilingual Memory," *Psychological Science*, 6 (January), pp. 45-49.
- Snodgrass, Joan Gay (1984), "Concepts and their Surface Representations," *Journal of Verbal Learning and Verbal Behavior*, 23 (February), pp. 3-22.
- Treasury Inspector General Tax Administration (2003), "Opportunities Exist to Improve the Administration of the Earned Income Tax Credit," Reference Number: 220-40-139.
- Treasury Inspector General Tax Administration (2000), "The Process of Developing Tax Forms for Individual Taxpayers Should be Further Improved," TIGTA 2000-40-00.
- U.S. Census (2000), "1998 American Community Survey," [www.census.gov](http://www.census.gov).
- United States General Accounting Office (2003), "Tax Administration: IRS Should Reassess the Level of Resources for Testing Forms and Instructions", (GAO-03-486).
- United States General Accounting Office, (1994) "Tax Administration: IRS Efforts to Improve Forms and Publications", (GAO/GGD-95-34).

**APPENDIX A**  
**English Text and Picture Survey**  
**Rebate Survey**  
**University of Wisconsin—Milwaukee**

**Introduction to the Survey:**

We are interested in examining how individuals understand rebates. Using the background information provided, you will be asked a series of questions regarding a rebate aimed at working people with children. Your responses are important to us. Please take your time responding to the questions. All answers are absolutely confidential and anonymous and will only be reported in summary form. Please note that we will never ask your name or any other identifying information.

**Who are we?**

We are teachers from the University of Wisconsin. We appreciate your assistance in this research study. To thank you for participating, we are making a \$500 contribution to the educational programs at UMOS.

Thank you for participating in our study,

Christine Bauman, Ph.D.  
University of Wisconsin-Milwaukee

David Luna, Ph.D.  
University of Wisconsin-Whitewater

Laura Peracchio, Ph.D.  
University of Wisconsin - Milwaukee

**Survey Background:**


We begin by asking you to read the information provided below. After you have read the information, please answer the questions that follow.

**Rebate**


There is a special rule that allows working families with qualifying children to receive a cash rebate from the Federal Government. The rules for qualifying children are described below.

**Tests for Qualifying Child**

Relationship




Age



regardless of age

Residency



A qualifying child is a child who is your

Son	Grandchild
Daughter	Stepchild
Adopted child	Foster child (see Eligible foster child on this page)

AND

was at the end of year...

Under age 19

OR

Under age 24 and a student

OR

Permanently and totally disabled at any time during the year,

AND

who..

Lived with you in the United States for more than half of year or, if a foster child, for all of year

**Special Rebate Rule:**

Sometimes, a child meets the rules above to be a qualifying child of more than one person for purposes of the rebate. However, only one person can claim the rebate using that child. If you and someone else have the same qualifying child, the person with the higher income is the only one who may be able to claim the rebate. This is true even if the person with the higher income does not claim the rebate or meets all of the rules to claim the rebate.

**Survey Questions:**

Please answer the questions that follow to the best of your ability. The examples are not intended to represent your own personal family arrangements. Please address any questions to the survey administrators who are fluent in Spanish and English.

**Example 1:**

Assume Teresa and her sister Ana live together. Teresa is 30 years old, and Ana is 15 years old. When their parents died 2 years ago, Teresa took over the care of Ana but did not adopt her.

**Question:** Is Ana considered Teresa's qualifying child?

Yes\_\_\_\_\_ No\_\_\_\_\_ Maybe\_\_\_\_\_ I'm not sure \_\_\_\_\_

**Question:** How did you arrive at your answer?

---

---

**Example 2:**

Assume your son Carlos turned 19 on December 10.

**Question:** Does Carlos meet the definition of qualifying child?

Yes\_\_\_\_\_ No\_\_\_\_\_ Maybe\_\_\_\_\_ I'm not sure \_\_\_\_\_

**Question:** How did you arrive at your answer?

---

---



**Example 3:**

Assume Juan lived in Milwaukee since 1999. He works in Milwaukee and earns \$18,000 each year. He provides all the support for his wife and two children, Julia and Ana, who live in Mexico.

**Question:** Are the two children Juan's qualifying children?

**Yes** \_\_\_\_\_ **No** \_\_\_\_\_ **Maybe** \_\_\_\_\_ **I'm not sure** \_\_\_\_\_

**Question:** How did you arrive at your answer?

---

---

**Example 4:**

Assume Juan and his 5-year old son, Miguel, lived with Juan's mother, Maria, all year long. Juan is 25 years old. Juan's only income during the year was \$9,300 from a part-time job. Maria's only income for the year was \$15,000 from her job. In order to be eligible for the rebate, a person must meet the qualifying child rules and take into consideration the special rebate rules described above.

**Question:** Miguel is the qualifying child of whom?

**Juan** \_\_\_\_\_ **Maria** \_\_\_\_\_ **Both** \_\_\_\_\_ **I'm not sure** \_\_\_\_\_

**Question:** How did you arrive at your answer?

---

---

**Question:** Who should claim the rebate?

**Juan** \_\_\_\_\_ **Maria** \_\_\_\_\_ **Both** \_\_\_\_\_ **I'm not sure** \_\_\_\_\_

**Question:** How did you arrive at your answer?

---

---

**Example 5:**

The following five questions relate to calculation of the rebate. Using the table below, please answer questions a-e.

- a. If a person has total income of \$4,850 and no children, how much is his/her rebate? **Answer:** \$\_\_\_\_\_
- b. If a person has total income of \$4,875 and one child, how much is his/her rebate? **Answer:** \$\_\_\_\_\_
- c. If a person has total income of \$5,251 and two children, how much is his/her rebate? **Answer:** \$\_\_\_\_\_
- d. If a person has total income of \$5,251 and three children, how much is his/her rebate? **Answer:** \$\_\_\_\_\_
- e. If a person has total income of \$5,345 and no children, how much is his/her rebate? **Answer:** \$\_\_\_\_\_

**Rebate Table**

If the amount of income is		And you have: No Children	One Child	Two Children
<i>At least</i>	<i>But</i>			
<b>Least</b>	<b>than</b>	<b>Your rebate is:</b>	<b>Your rebate is:</b>	<b>Your rebate is:</b>
4,800	4,850	364	1,641	1,930
4,850	4,900	364	1,658	1,950
4,900	4,950	364	1,675	1,970
4,950	5,000	364	1,692	1,990
5,000	5,050	364	1,709	2,010
5,050	5,100	364	1,726	2,030
5,100	5,150	364	1,743	2,050
5,150	5,200	364	1,760	2,070
5,200	5,250	364	1,777	2,090
5,250	5,300	364	1,794	2,110
5,300	5,350	364	1,811	2,130
5,350	5,400	364	1,828	2,150

**Please circle number that best describes your reaction:**

1. Using the rebate table was?

**Extremely  
Easy****Extremely  
Difficult**

1                      2                      3                      4                      5

2. Overall, the survey questions were?

**Extremely  
Easy****Extremely  
Difficult**

1                      2                      3                      4                      5

3. The rebate information provided was?

**Extremely  
Easy****Extremely  
Difficult**

1                      2                      3                      4                      5

4. Describing how I arrived at answers was?

**Extremely  
Easy****Extremely  
Difficult**

1                      2                      3                      4                      5

5. I am confident that my responses are?

**Not  
Accurate****Very  
Accurate**

1                      2                      3                      4                      5

6. The rebate examples were?

**Not  
Familiar****Very  
Familiar**

1                      2                      3                      4                      5

### **General Survey Information:**

On this page, we need to ask you some background questions. All responses are confidential and will be used in summary form only.

What language do you use in the following situations?

(1=Only English; 2=Mostly English; 3=Half English and Half Spanish; 4=Mostly Spanish; 5=Only Spanish).

	Only English					Only Spanish				
At home	1	2	3	4	5					
At work	1	2	3	4	5					
At school (if you are a student)	1	2	3	4	5					
With friends	1	2	3	4	5					
In what language do you watch TV?	1	2	3	4	5					

What language did you learn first? ☐ English ☐ Spanish  
☐ Both at the same time

How did you learn (mark all that apply):

**English?** ☐ At school ☐ From friends and/or family ☐ In the community

**Spanish?** ☐ At school ☐ From friends and/or family ☐ In the community

How proficient are you currently in each of your languages regarding the following areas? (1=Very low; 5=Like a native speaker)

	Speaking					Comprehension					Writing					Reading				
Spanish	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
English	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

How well do you think you can do these things in English and Spanish?  
 (1=Very bad; 5=Very well)

	English					Spanish				
Understand cooking directions, such as those in a recipe.	1	2	3	4	5	1	2	3	4	5
Understand newspaper headlines.	1	2	3	4	5	1	2	3	4	5
Read personal letters or notes written to you.	1	2	3	4	5	1	2	3	4	5
Read popular novels without using a dictionary.	1	2	3	4	5	1	2	3	4	5
Make out a shopping list.	1	2	3	4	5	1	2	3	4	5
Fill out a job application form requiring information about your interests and qualifications.	1	2	3	4	5	1	2	3	4	5
Write a letter to a friend.	1	2	3	4	5	1	2	3	4	5
Leave a note for someone explaining where you will be or when you will come home.	1	2	3	4	5	1	2	3	4	5
Write an advertisement to sell a bicycle.	1	2	3	4	5	1	2	3	4	5

Where were you born? State/province: \_\_\_\_\_  
Country: \_\_\_\_\_

If you were not born in the U.S., how many years have you lived in the U.S.?  
\_\_\_\_\_ years.

Where was your mother born? State/province: \_\_\_\_\_  
Country: \_\_\_\_\_

Where was your father born? State/province: \_\_\_\_\_  
Country: \_\_\_\_\_

Are you Latino or Hispanic? \_\_\_ Yes \_\_\_ No

To what ethnic or racial group do **you** belong? (you can check more than one):

☐ Mexican origin                      ☐ Puerto Rican origin  
☐ Dominican origin                      ☐ Cuban origin  
☐ Other Latino: Which? \_\_\_\_\_  
☐ Caucasian (White)                      ☐ Africa-American (Black)  
☐ Other: \_\_\_\_\_

Disagree                      Agree  
Totally                      Totally

I identify strongly with my ethnic group.	1	2	3	4	5	6	7
I enjoy celebrating Hispanic/Latino cultural events.	1	2	3	4	5	6	7
I think it's important to support activities that maintain our cultural heritage.	1	2	3	4	5	6	7
If I had children, I would make sure they learn their cultural tradition.	1	2	3	4	5	6	7

If you have a **spouse/partner**, to what ethnic or racial group does he/she belong? (you can check more than one):

☐ Mexican origin                      ☐ Puerto Rican origin  
☐ Dominican origin                      ☐ Cuban origin  
☐ Other Latino: Which? \_\_\_\_\_  
☐ Caucasian (White)                      ☐ Africa-American (Black)  
☐ Other: \_\_\_\_\_

As you know, some people in the U.S. are bilingual. If you speak Spanish, please answer the next three questions: (Please circle)

1. Would you say you speak English?

Very Well	Well	Not Well	Not at All
--------------	------	-------------	---------------

1	2	3	4
---	---	---	---

2. Would you say your family speaks Spanish at home?

All the Time	Most of the Time	Sometimes	Not at All
-----------------	---------------------	-----------	---------------

1	2	3	4
---	---	---	---

3. If you had the chance to communicate with someone just as well in English or Spanish, which would you prefer to converse with them?

<b>Spanish</b>	<b>Either Spanish or English</b>	<b>English</b>
1	2	3

How important is it to assimilate with the dominant Anglo culture?

<b>Not at all</b>				<b>A lot</b>
1	2	3	4	5

How important is it to maintain identity with your Hispanic culture?

<b>Not at all</b>				<b>A lot</b>
1	2	3	4	5

How often do you speak Spanish?

<b>Never</b>				<b>All the time</b>
1	2	3	4	5

How many years of schooling do you have? Circle the appropriate number.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17+

**8<sup>th</sup> grade** **High School Graduate** **University Graduate**

What was the language used the most by your teachers in elementary school?

☐ Spanish ☐ English ☐ I did not go to elementary school.

What was the language used the most by your teachers in high school?

☐ Spanish ☐ English ☐ I did not go to high school.

What was the language used the most by your teachers in college?

☐ Spanish ☐ English ☐ I did not go to college.

How well do you think you can do the following things?

	Very Badly				Very Well
Adding/subtracting numbers on a piece of paper.	1	2	3	4	5
Adding/subtracting numbers in your head.	1	2	3	4	5
Multiplying/dividing numbers on a piece of paper.	1	2	3	4	5
Multiplying/dividing numbers in your head.	1	2	3	4	5

On average how many hours per day do you read books?

☐ less than 1 hour ☐ 1-2 hours ☐ 2-3 hours  
☐ 3-4 hours ☐ 4-5 hours ☐ more than 5 hours

On average how many hours per day do you read magazines AND newspapers?

☐ less than 1 hour ☐ 1-2 hours ☐ 2-3 hours  
☐ 3-4 hours ☐ 4-5 hours ☐ more than 5 hours

What magazines or newspapers do you read regularly?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ None

On average, about how many hours per day do you watch television?

\_\_\_\_ less than 1 hour    \_\_\_\_ 1-2 hours    \_\_\_\_ 2-3 hours  
 \_\_\_\_ 3-4 hours    \_\_\_\_ 4-5 hours    \_\_\_\_ more than 5 hours

You are:            Male \_\_\_\_\_            Female \_\_\_\_\_

You are:   Single \_\_\_\_\_   Married \_\_\_\_\_   Divorced \_\_\_\_\_   Widowed \_\_\_\_\_

In what year were you born?    19 \_\_\_\_\_

How many children do you have?    \_\_\_\_\_

What is your household income?

\_\_\_\_ Less than \$10,000            \_\_\_\_ \$10,000 to \$32,000  
 \_\_\_\_ \$32,000 to \$50,000            \_\_\_\_ Over \$50,000

Have you ever prepared your own income taxes?    \_\_\_\_ Yes    \_\_\_\_ No

If no, why? \_\_\_\_\_

Do you perceive income tax preparation as? (Please circle)

<b>Extremely</b>					<b>Extremely</b>
<b>Easy</b>					<b>Difficult</b>
1	2	3	4	5	

How well do you understand U.S. taxes?

<b>Not at all</b>				<b>A lot</b>
1	2	3	4	5



**Thank you for your time.  
We greatly appreciate you helping us with our survey**

**Please return your survey to the survey administrator in the  
front of the room.**

## **Appendix B**

### **English Text Only**

#### **Survey Background:**

We begin by asking you to read the information provided below. After you have read the information, please answer the questions that follow.

#### **Rebate**

There is a special rule that allows working families with qualifying children to receive a cash rebate from the Federal government. The rules for qualifying children are described below.

#### **Rules for Qualifying Child – Your Child Must Meet the Relationship, Age and Residency Test**

Your child is a qualifying child if your child meets three tests. The three tests are:

- 1) Relationship,
- 2) Age, and
- 3) Residency.

The paragraphs that follow contain more information about each test.

#### **Relationship Test**

Your child must be either your son, daughter, adopted child, grandchild, stepchild, or eligible foster child. The following definitions clarify the relationship test.

**Adopted child.** Your adopted child includes a child placed with you for adoption by an authorized placement agency, even if the adoption is not final. An authorized placement agency includes any person authorized by State law to place children for legal adoption.

**Grandchild.** For the rebate, this means any descendant of your son, daughter, or adopted child. For example, a grandchild includes your great grandchild, great great grandchild, etc.

**Eligible foster child.** For the rebate, a person is your eligible foster child if all the following are true.

- 1) You cared for that child as you would your own child.
- 2) The child lived with you for the *whole* year, except for temporary absences.
- 3) The child is your brother, sister, stepbrother, or stepsister; a descendant (including a child or adopted child) of your brother, sister, stepbrother, or stepsister; or a child placed with you by an authorized placement agency.

### **Age Test**

Your child must be:

- 1) Under age 19 at the end of year,
- 2) A full time student under age 24 at the end of year, or
- 3) Permanently and totally disabled at any time during the year, regardless of age.

### **Residency Test**

Your child must have lived with you in the United States for more than half of year (all year if an eligible foster child). The following definitions clarify the residency test.

**Home.** Your home can be any location where you regularly live within one of the 50 States or the District of Columbia.

**Special Rebate Rule:**

Sometimes, a child meets the rules above to be a qualifying child of more than one person for purposes of the rebate. However, only one person can claim the rebate using that child. If you and someone else have the same qualifying child, the person with the higher income is the only one who may be able to claim the rebate. This is true even if the person with the higher income does not claim the rebate or meet all of the rules to claim the rebate.